TIPS MATH – MIDDLE GRADES

Student's Name:_____ Date: _____

TIPS: Pantry Search

Dear Family Partner,

In math, we are identifying **UNITS OF MEASURE**. I hope you enjoy this activity with me. The assignment is due _____ .

Sincerely,

_____

I. LOOK THIS OVER: Explain this example to your family partner.

The label at the right shows that the package of Reese's Peanut Butter Cups weigh 1.6 ounces (customary measure) which is the same as 45 grams (metric measure).

II. NOW, TRY THIS: Show your family partner how you do this example.

Almost all grocery store items have customary and metric units of measure on the label. Search through your pantry and/or refrigerator to find five items with different weights or volume and record the items and their customary and metric units of measur in the table below.

Name of Item	Customary	Metric
Example: Coca-Cola	*12 oz.*	*354 ml.*

IN THE REAL WORLD…

Work with your family partner to do this.

According to the labels recorded, what products (and how many) could be combined to equal:

1) a pound?

2) a gallon?

3) a kilogram?

4) a liter?

III. HOME-TO-SCHOOL COMMUNICATION

Dear Family Partner,

Please give me your reactions to your child's work on this activity. Write YES or NO for each statement.

_____ 1. My child understood the homework and was able to complete it.

_____ 2. My child and I enjoyed the activity.

_____ 3. This assignment helped me know what my child is learning in math.

Any other comments: _____

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TIPS MATH – MIDDLE GRADES

Student's Name:_____ Date: _____

TIPS: Formulas of Life!

Dear Family Partner,

In math, we are working with **FORMULAS**. I hope you enjoy this activity with me. The assignment is due _____ .

Sincerely,

_____

I. LOOK THIS OVER: Explain this example to your family partner.

Formulas give the relationship between two or more variables.

- $A = lw$ (area of a rectangle equals the length times the width)
- $d = rt$ (distance traveled equals the rate of speed times the amount of time traveled)
- $s = r - d$ (sale price equals th regular price minus the discount)

A trucker drove 150 miles at an average speed of 50 miles per hour. How long did the trip take? Use the formula $d = rt$.

$150 = 50t$ (Divide both sides of the equation by 50)

$3 \text{ hr} = t$

II. NOW, TRY THIS: Show your family partner how you do these examples.

A rectangular swimming pool is 30 feet (length) by 15 feet (width). What is the area?
(Use the formula for area shown above.)

The regular price of a coat was $215. The discount was $50. What was the sale price?

IN THE REAL WORLD…

Work with your family partner to do this.

Work with your family partner to create a story problem for each formula that was given in section I. Use the appropriate formula to solve each problem. **BE CREATIVE!!**

ANSWER TO "NOW, TRY THIS":

```
A = lw
Area = length x width
A = 30 x 15
A = 450 sq. ft.
```

```
s = r – d
s = 215 – 50
s = $165
```

III. HOME-TO-SCHOOL COMMUNICATION

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TIPS MATH – MIDDLE GRADES

Student's Name:_____ Date: _____

TIPS: On the Edge!

Dear Family Partner,

In math, we are **CALCULATING PERIMETER**. I hope you enjoy this activity with me. The assignment is due _____ .

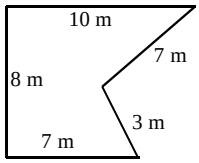
Sincerely,

_____

I. LOOK THIS OVER:

Explain this example to your family partner.

Remember: To find the perimeter of a polygon (a closed figure with sides), you add the lengths of <u>all</u> sides.



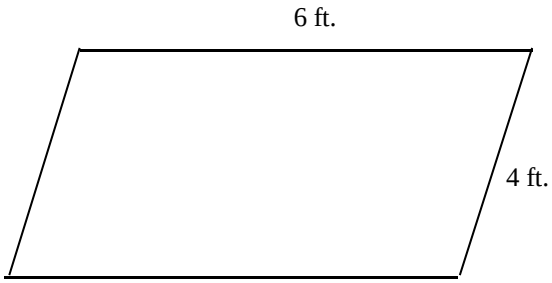
Perimeter = 10 m + 8 m + 7 m + 3 m + 7 m = 35 m.

II. NOW, TRY THIS:

Show your family partner how you do this example.

Find the perimeter of this parallelogram:

Perimeter =



III. PRACTICE SES-

Complete these examples on your own. Show your work. Explain one example to your family partner.

1) Find the perimeter of a square with sides of 23 inches

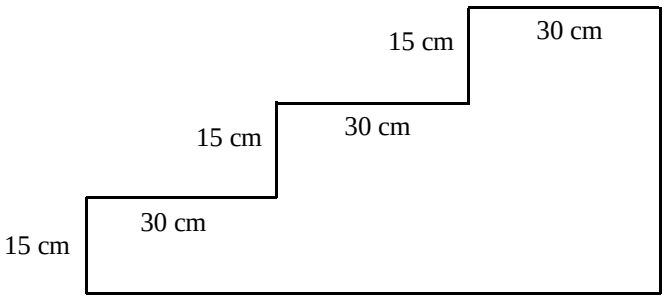
Perimeter =

*** CONTINUE YOUR WORK ON THE BACK OF THIS PAGE ***

WORK SPACE FOR PRACTICE

2) Find the perimeter:

Perimeter =



IN THE REAL WORLD…

Work with your family partner to do this.

Using the metric ruler that your teacher gave you, find the perimeter of the following items with your family partner.

1) Your TV screen

2) Your refrigerator door

3) Choose another item to measure with your family partner

ANSWER TO "NOW, TRY THIS":

Perimeter = 6 ft. + 4 ft. + 6 ft. + 4 ft. = 20 ft.

IV. HOME-TO-SCHOOL COMMUNICATION

Dear Family Partner,

Please give me your reactions to your child's work on this activity. Write YES or NO for each statement.

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TIPS MATH – MIDDLE GRADES

Student's Name:_____ Date: _____

TIPS: See Spot Run!

Dear Family Partner,

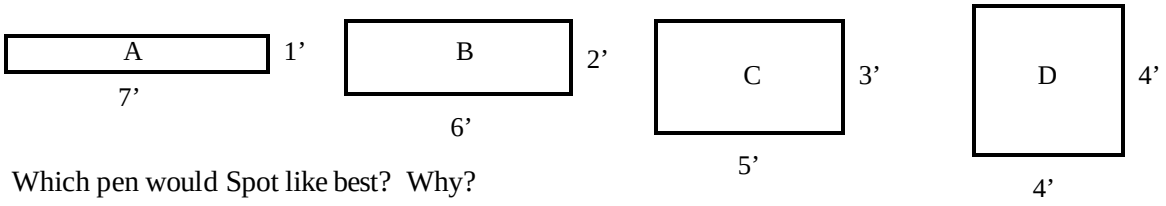
In math, we are studying **AREA**. I hope you enjoy this activity with me. The assignment is due _____ .

Sincerely,

_____

I. LOOK THIS OVER: Explain this example to your family partner.

You have 16 feet of fence to make a dog pen. What rectangular pens can be made? Use your squares to create each pen and record the number of squares used for each. What is this measure



Which pen would Spot like best? Why?

The measure is called area. Spot would like the pen with the largest area which is D, 16 square feet, so he would have more room to run.

II. NOW, TRY THIS: Show your family partner how you do this example.

You have 18 feet of fence to make a dog pen. Make rectangles with your squares and sketch each rectangle on this sheet. Find the area of each square by counting. Now find the area in a differen way. How do you do this? State a method for finding th area of a rectangle.

III. PRACTICE SECTION: Complete this example on your on. Show

Now use 20 feet of fence and make all the rectangular dog pens that you can. Sketch each one and find the area both by counting and multiplying. Choose the pen that Spot would like.

*** *CONTINUE YOUR WORK ON THE BACK OF THIS PAGE* ***

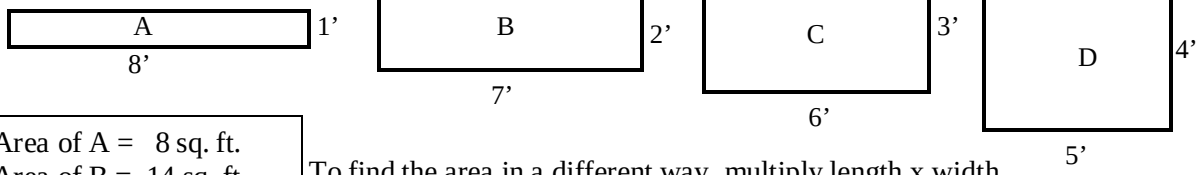
WORK SPACE FOR PRACTICE

IN THE REAL WORLD…

Work with your family partner to do this.

Use the ages of 2 or 3 family members (up to 40) to represent the number of feet of fence you have. Make rectangular dog pens using the fence, sketch and label each one, then find the area of each. Make any observations you can about the number of pens you can make and why. If you need more space, use another sheet of paper.

ANSWER TO "NOW, TRY THIS":



Area of A = 8 sq. ft.
Area of B = 14 sq. ft.
Area of C = 18 sq. ft.
Area of D = 20 sq. ft.

To find the area in a different way, multiply length x width.

A => 8 x 1 = 8 sq. ft.
B => 7 x 2 = 14 sq. ft.
C => 6 x 3 = 18 sq. ft.
D => 5 x 4 = 20 sq. ft.

IV. HOME-TO-SCHOOL COMMUNICATION

Dear Family Partner,

Please give me your reactions to your child's work on this activity. Write YES or NO for each statement.

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TIPS MATH – MIDDLE GRADES

Student's Name:_____ Date: _____

TIPS: Around and Around We Go!

Dear Family Partner,

In math, we are finding the **CIRCUMFERENCE OF A CIRCLE**. I hope you enjoy this activity with me. The assignment is due _____ .

Sincerely,

_____

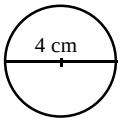
I. LOOK THIS OVER:

Explain this example to your family partner.

Remember: *1) The circumference (C) is the distance around a circle.*
2) A diameter (d) is a line segment that passes through the center from one edge to th other.

3) $\pi = \frac{C}{d}$ $\pi \cdot 3.14$

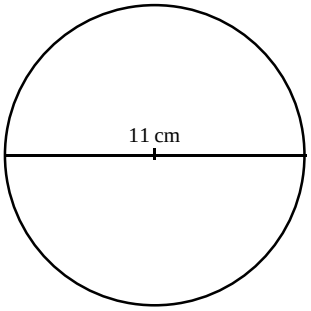
Example:



C • π •
C • 3.14 • 4
C • 12.56 cm

II. NOW, TRY THIS:

Show your family partner how you do this example.



Find the circumference of this circle. Use 3.14 for π.

C • π •

C •

C •

IN THE REAL WORLD…

Ask your family partner to help you do the following steps.

1) Find three different flat circular items.
2) Next, cut a piece of string, thread, or yarn that measures exactly across the center of the item from edge to edge.
3) Compute the circumference of each item.
4) Cut a piece of string, thread, or yarn that measures exactly around the item. This is the circumf r-ence.

**** CONTINUED ON THE BACK OF THIS PAGE ****

5) Does the length of each string match the results you computed? How many times does the diameter string fit onto the circumference string?

WORK SPACE FOR PRACTICE

ANSWER TO "NOW, TRY THIS":

$C \cdot \pi \cdot$

$C \cdot 3.14 \cdot 1$

$C \cdot 34.54$ cm

III. HOME-TO-SCHOOL COMMUNICATION

Dear Family Partner,

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TIPS MATH – MIDDLE GRADES

Student's Name:_____ Date: _____

TIPS: Parts Is Parts!

Dear Family Partner,

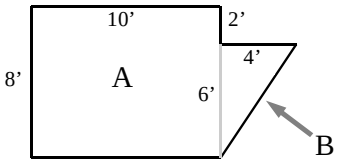
In math, we are studying area of irregular shapes. I hope you enjoy this activity with me. The assignment is due _____ .

Sincerely,

_____

I. LOOK THIS OVER: Explain this example to your family partner.

Sometimes we have to find the areas of irregular shapes. We have to cut the figure into shapes that we can find the area of.

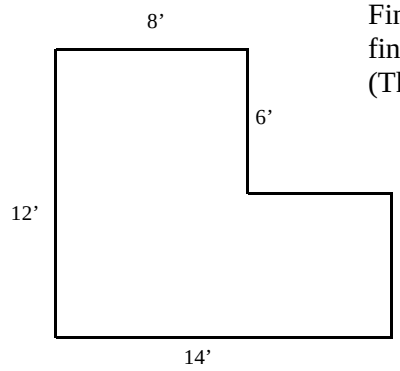


Area of A = length x width = 10 x 8 = 80 sq. ft.

Area of B = ½ x base x height = ½ x 4 x 6 = 2 x 6 = 12 sq. ft.

Total area = 80 + 12 = 92 sq. ft.

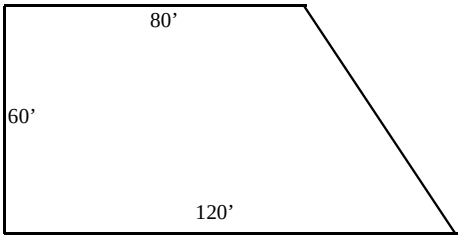
II. NOW, TRY THIS: Show your family partner how you do this example.



Find the area of this figure. Use broken lines to cut it into shapes, then find the area. Notice that you will have to find some missing lengths. (There is more than one way to do this problem.)

III. PRACTICE SECTION: Complete this example on your on. Show

You are going to purchase a piece of property which looks like this:



How many square feet of land are you going to buy?

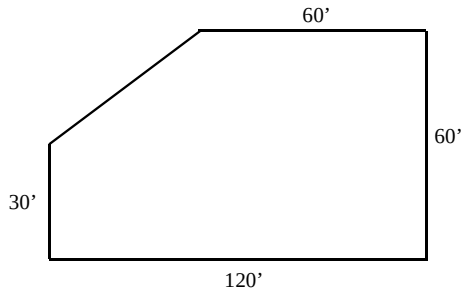
*** *CONTINUE YOUR WORK ON THE BACK OF THIS PAGE* ***

WORK SPACE FOR PRACTICE

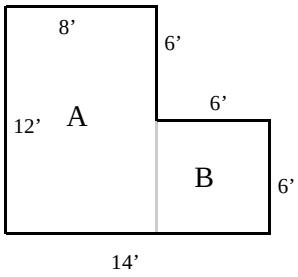
IN THE REAL WORLD…

Work with your family partner to do this.

Your back yard looks like this. Use broken lines to cut it into shapes, then find the area.



ANSWER TO “NOW, TRY THIS”:



Area of A = length x width = 12 x 8 = 96 sq. ft.

Area of B = length x width = 6 x 6 = 36 sq. ft.

Total area = 96 + 36 = 132 sq. ft.

IV. HOME-TO-SCHOOL COMMUNICATION

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